



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/722,099

11/25/2003

James F. Ziech

60680-651

6346

7590

03/06/2006

DYKEMA GOSSETT PLLC
39577 Woodward Avenue
Suite 300
Bloomfeild Hills, MI 48304

EXAMINER

DUNN, DAVID R

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,099

Applicant(s)

ZIECH, JAMES F.

Examiner

David Dunn

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/25/03, 1/20/04, 2/2/04, 3/11/04, 8/3/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first spring being “centered along a longitudinal axis” (claims 5 and 12) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 5 and 12 are objected to because of the following informalities: The springs do not appear to be centered “along” a longitudinal axis of the first axle; it appears that they are actually centered “above” the axis of the axle. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Lamela et al. (US 7,000,724).

Lamela et al. discloses a vehicle suspension, comprising: a beam (200) having first and second spaced side walls (300; see Figure 3) and a lateral wall (706; see Figure 7) extending between said first and second side walls, said first and second side walls defining first and second recesses (see Figures 3 and 7) proximate first and second ends, respectively, of said beam; wherein said first and second recesses receive first and second axles (508; Figure 3) of a vehicle and said beam is pivotally (at 230; Figure 2) coupled to a frame of said vehicle at a location intermediate of said first and second axles.

Art Unit: 3616

5. Claims 1-3, 8, 10, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hickman et al. (US 3,936,073).

Hickman et al. discloses a vehicle suspension, comprising: a beam (21) having first and second spaced side walls (see 21; Figures 3 and 4) and a lateral wall extending between said first and second side walls, said first and second side walls defining first and second recesses (25; Figure 1) proximate first and second ends, respectively, of said beam; wherein said first and second recesses receive first and second axles (12, 13) of a vehicle and said beam is pivotally coupled (35) to a frame of said vehicle at a location intermediate of said first and second axles. The beam is rigidly attached to the axles (see Figure 1). The suspension further comprises first and second springs (rubber springs 76 and compression springs 69) between the frame and beam. The spaced walls are widest at the intermediate location and taper to the ends (see Figure 1). Hickman shows the beam attached by a fastener (36) through a bushing in the central aperture.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 5, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hickman et al. in view of Baxter et al. (US 6,916,037).

Hickman et al. is discussed above but fails to show the springs centered above the axle or shock absorbers at the ends of the beam.

Baxter et al. teaches a suspension comprising a pair of beams (17) with recesses receiving axles (27, 33), first and second springs (35) are each centered above the axis of the first and second axles.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hickman et al. with the teachings of Baxter et al. in order to provide air springs above the axles to provide an improved suspension for the vehicle.

8. Claims 6, 7, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hickman et al. in view of Raidel (US 4,714,269).

Hickman et al. is discussed above but fails to show shock absorbers at the ends of the beam.

Raidel teaches a suspension (32) having first and second shock absorbers (76) at the ends of the beam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hickman et al. with the teachings of Raidel in order to provide an increased stability for the beam.

9. Claims 9 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hickman et al. in view of VanDenberg (US 4,991,868).

Hickman et al. is discussed above and fails to show a bushing having opposed voids.

VanDenberg teaches a suspension arm attached to the vehicle frame through an aperture having a bushing with opposed voids (see Figures 2 and 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hickman et al. with the teachings of VanDenberg to provide a bushing with

Art Unit: 3616

opposed voids in order to provide improved spring rates in the horizontal versus vertical directions.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hartzell et al. shows a beam of interest. Adema et al. shows a suspension of interest.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 571-272-6670. The examiner can normally be reached on Mon-Fri, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Dunn
Primary Examiner
Art Unit 3616